CFR part 1065, subpart F, for conducting the raw CO_2 measurement.

(7) As soon as possible, transfer the idle test exhaust and dilution air samples to the analytical system and process the samples according to § 86.1540–84. Obtain a stabilized reading of the exhaust sample on all analyzers within 20 minutes of the end of the sample collection phase of the test.

(f) If the raw exhaust sampling and analysis technique specified in 40 CFR part 1065 is used, the following procedures apply:

(1) Warm up the engine or vehicle per paragraphs (c) and (d) of this section. Operate the engine or vehicle at the conditions specified in paragraph (e)(4) of this section.

(2) Follow the sampling and exhaust measurement requirements of 40 CFR part 1065, subpart F. The idle sample shall be taken for 60 seconds minimum, and no more than 64 seconds. The chart reading procedures of 40 CFR part 1065, subpart F, shall be used to determine the analyzer response.

(g) If the engine or vehicle stalls at any time during the test run, the test is void.

[48 FR 52252, Nov. 16, 1983, as amended at 60 FR 34377, June 30, 1995; 70 FR 40441, July 13, 2005. Redesignated at 73 FR 37194, June 30, 2008]

§ 86.1540 Idle exhaust sample analysis.

(a) Record the CO idle concentrations in percent.

(b) If the CVS sampling system is used, the analysis procedures for dilute CO and CO_2 specified in 40 CFR part 1065 apply. Follow the raw CO_2 analysis procedure specified in 40 CFR part 1065, subpart F, for the raw CO_2 analyzer.

(c) If the continuous raw exhaust sampling technique specified in 40 CFR part 1065 is used, the analysis procedures for CO specified in 40 CFR part 1065, subpart F, apply.

[48 FR 52252, Nov. 16, 1983, as amended at 70 FR 40441, July 13, 2005. Redesignated at 73 FR 37194, June 30, 2008]

§ 86.1542 Information required.

(a) *General data—heavy-duty engines.* Information shall be recorded for each idle emission test as specified in 40 CFR part 1065, subpart G. The following test data are required:

(1) Date and time of day.

(2) Test number.

(3) Engine intake air or test cell temperature.

(4) Barometric pressure.

NOTE: A central laboratory barometer may be used: *Provided,* That individual test cell barometric pressures are shown to be within ±0.1 percent of the barometric pressure at the central barometer location.

(5) Engine intake or test cell and CVS dilution air humidity.

(6) Curb idle speed during the test.

(7) Idle exhaust CO concentration (dry basis).

(8) Idle exhaust raw CO_2 concentration (if applicable).

(9) Dilute bag sample CO and CO_2 concentrations (if applicable).

(10) Total CVS flow rate with calculated dilution factor for the idle mode (if applicable).

(b) *General data—light-duty trucks.* The following information shall be recorded with respect to each test:

(1) Test number.

(2) System or device tested (brief description).

(3) Date and time of day for the test.

(4) Instrument operated.

(5) Vehicle: ID number, manufacturer, model year, standards, engine family, evaporative emissions family, basic engine description (including displacement, number of cylinders, turbocharger used and catalyst usage), fuel system (including number of carburetors, number of carburetor barrels, fuel injection type and fuel tank(s) capacity and location), engine code, gross vehicle weight rating, inertia weight class and transmission configuration, as applicable.

(6) All pertinent instrument information such as tuning, gain, serial number, detector number and range. As an alternative a reference to a vehicle test cell number may be used, with the advance approval of the Administrator, provided test cell calibration records show the pertinent instrument information.

(7) Recorder charts or computer printouts: Identify zero, span, exhaust gas and dilution air sample traces or computer readings (if applicable).

(8) Test cell ambient temperature and, if applicable, barometric pressure and humidity.

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